

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Mozart Street Mercury Spill - Removal Polrep  
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #5  
Final  
Mozart Street Mercury Spill  
Chicago, IL  
Latitude: 41.9023033 Longitude: -87.6869188

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**From:** Verneta Simon / Stavros Emmanouil, OSCs

**Date:** 2/24/2015

**Reporting Period:** 12/28/14 to 2/24/15

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	C55F	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	12/15/2014	<b>Start Date:</b>	12/15/2014
<b>Demob Date:</b>	2/10/2015	<b>Completion Date:</b>	2/10/2015
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	Complete
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

CERCLA Emergency Response. Mercury spill clean-up at one church and three residences.

#### 1.1.2 Site Description

From December 12, 2014 through December 31, 2014, and on February 10, 2015 EPA and START mobilized to a total of four City of Chicago locations to investigate suspected mercury contamination at the request of the Chicago Department of Public Health.

#### 1.1.2.1 Location

Two of the sites are located south of the Logan Square neighborhood (N Mozart St and W North Ave), one site is located in the Wicker Park neighborhood (N Artesian Ave), and one site is located in the North Lawndale neighborhood (S Central Park Ave) in Chicago, Illinois. In general, each area is a mix of multi-story single-to multi-family homes along with apartment buildings.

#### 1.1.2.2 Description of Threat

Unknown volume of elemental mercury. According to the Agency for Toxic Substances and Disease Registry (ATSDR), the nervous system is sensitive to metallic mercury. Exposure to very high levels of metallic mercury vapor can cause brain, kidney, and lung damage and may seriously harm a developing fetus. Exposure to mercury vapor concentrations high enough to produce such serious effects might also cause coughing, chest pains, nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation. Exposure to lower levels of airborne mercury for prolonged periods of time would produce more subtle effects, such as irritability, sleep disturbances, excessive shyness, tremors, coordination problems, changes in vision or hearing, and memory problems

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Refer to Polrep 1 through Polrep 4 for activities prior to December 27, 2014. USEPA and START conducted final assessments at N Mozart Street on December 30 and 31, 2014, and February 10, 2015. The final assessment result conducted on February 10, 2015 is summarized in the Table below.

##### START Final Mercury Vapor Screening Results Residence on February 10, 2015 N Mozart St., Chicago, IL

Location	BZ (ng/m3)	Floor (ng/m3)	Temperature (°F)
Initial Entry	55	--	68
Basement Sitting Room	61	--	
Basement Laundry	94	384	

Mercury vapor exceeded 1,000 ng/m3 immediately above the laundry room drain on December 30 and 31, 2014. However mercury vapors in the breathing zone were below 300 ng/m3 on December 30 and 31, 2014 .

#### Notes:

- = No readings taken

°F = Degrees Fahrenheit

BZ = Breathing Zone

ng/m3 = nanograms per cubic meter

Readings observed with a Lumex 915M Mercury Analyzer

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

On December 12, 2014 USEPA and START responded to a City of Chicago Department of Public Health (CDPH) request for assistance in response to a mercury spill at Clemente High School. The individual potentially responsible for the spill also showed and handled mercury at San Lucas Church (W North Street) and a residence on N Mozart St. Mercury screening levels at both locations were above the USEPA/ATSDR recommended action level for normal occupancy for the most sensitive person.

On December 19, 2014 USEPA and START responded to another CDPH request for assistance involving the origin of the mercury for the Clemente High School mercury spill. This request included an additional two residences (N Artesian Ave and S Central Park Ave) where mercury was handled. Mercury screening levels at both locations were above the USEPA/ATSDR recommended action level for normal occupancy for the most sensitive person.

A total of three residences and one Church are included in the Mozart St mercury spill.

#### 2.1.2 Response Actions to Date

Refer to Polrep 1 through 4 for activities prior to December 27, 2014.

On December 30, 2014, USEPA and START assessed mercury vapors in the basement laundry room drain at N Mozart St. The previous mercury assessment conducted on December 19, 2014 indicated mercury vapor below 1,000 ng/m3 in the breathing zone and floor throughout the house with the exception the laundry room drain. The mercury vapors immediately above the drain on December 30, 2014 was 2,248 ng/m3.

On December 31, 2014, USEPA and START returned to the N Mozart St residence to confirm elevated mercury vapors in the basement laundry room drain. Mercury vapors decreased to 1,084 ng/m3 immediately above the drain. Mercury vapors were 830 ng/m3 six inches above the laundry room drain .

On February 10, 2015, USEPA and START returned to the N Mozart Street residence to confirm elevated mercury vapors in the basement laundry room drain. Mercury vapors decreased to 384 ng/m3 immediately above the laundry room drain. Mercury vapors in the breathing zone in the laundry room were below 100 ng/m3.

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Multiple - Ongoing

#### 2.1.4 Progress Metrics

Location	Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
W North	None					
N Mozart	Household	Solid	(2) 55-gallon		Non-	WM

	item/debris/PPE		drum		hazardous	Grayslake, IL
N Artesian	Household item/debris/PPE	Solid	(47) polyurethane bags (1) container with recovered mercury	14221567JJK (Hazardous)	Multiple	Multiple
S Central Park	Household item/debris/PPE	Solid	(27) polyurethane bags (1) container with mercury	14221567JJK (Hazardous)	Multiple	Multiple

Notes:

Multiple = Multiple treatment of waste; non-hazardous waste disposed of at Waste Management facility in Grayslake, IL; hazardous mercury waste was delivered to Waste Management in Union Grove, WI.

WM = Waste Management

Regional Metrics		
This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	N/A
	Cubic yards of contaminated sediments removed and/or capped	N/A
	Gallons of oil/water recovered	N/A
	Acres of soil/sediment cleaned up in floodplains and riverbanks	N/A
Stand Alone Assessment	Number of contaminated residential yards cleaned up	N/A
	Number of workers on site	7
Contaminant(s) of Concern	Mercury	
Oil Response Tracking		
Estimated volume	Initial amount released	N/A
	Final amount collected	N/A
CANAPS Info	FPN Ceiling Amount	N/A
	FPN Number	N/A
	Body of Water affected	N/A
Administrative and Logistical Factors (Place X where applicable)		
Precedent-Setting HQ Consultations (e.g., fracking, asbestos)	Community challenges or high involvement	Radiological
More than one PRP	Endangered Species Act / Essential Fish Habitat issues	Explosives
AOC	Historic preservation issues	X Residential impacts
UAO	NPL site	Relocation
DOJ involved	Remote location	Drinking water impacted
Criminal Investigation Division involved	Extreme weather or abnormal field season	X Environmental justice
Tribal consultation or coordination or other issues	Congressional involvement	High media interest
Statutory Exemption for \$2 Million	Statutory Exemption for 1 Year	Active fire present
X Hazmat Entry Conducted – Level A, B or C	Incident or Unified Command established	Actual air release (not threatened)

Green Metrics		
Metric	Amount	Units
Diesel Fuel Used	0	gallons
Unleaded Fuel Used	0	gallons
Alternative/E-85 Fuel Used	0	gallons
Electricity from Coal	0	kW
Electricity from solar/wind	0	kW
Electricity from grid/mix	0	kW
Propane	0	gallons
Solid waste used	0	pounds
Solid waste recycled	0	pounds
Cardboard & Plastic Recycled	0	pounds
Plastics Recycled	0	pounds
Aluminum Recycled	0	pounds

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

None at this time. Removal Action has been completed.

#### 2.2.1.1 Planned Response Activities

None at this time. Removal Action has been completed.

#### 2.2.1.2 Next Steps

None at this time. Removal Action has been completed, however the Action Memo still needs to be drafted and signed off.

### 2.2.2 Issues

None.

## 2.3 Logistics Section

None.

## 2.4 Finance Section

### 2.4.1 Narrative

Finance ceilings and costs for this site have been established as shown below.

#### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$50,000.00	\$31,637.69	\$18,362.31	36.72%
TAT/START	\$30,000.00	\$21,881.42	\$8,118.58	27.06%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$80,000.00</b>	<b>\$53,519.11</b>	<b>\$26,480.89</b>	<b>33.10%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

## 2.5 Other Command Staff

### 2.5.1 Safety Officer

EPA OSC is the on-site Safety Officer for the response. A health and safety plan was generated and signed by appropriate site personnel. Health and Safety briefings were conducted daily during site operations.

### 2.5.2 Liaison Officer

NA

### 2.5.3 Information Officer

NA

## 3. Participating Entities

### 3.1 Unified Command

### 3.2 Cooperating Agencies

Chicago Fire Department  
Agency for Toxic Substance and Disease Control  
Chicago Department of Public Health  
Chicago School Representatives

## 4. Personnel On Site

Organization	Position	# Personnel

EPA	OSC & Community Involvement Coordinator	2
Tetra Tech	START	1
ER	ERRS	0

## 5. Definition of Terms

CHD = Chicago Health Department

ng/m3 = nanogram per meters cubed

START = Superfund Assessment and Response Team

ATSDR = Agency for Toxic Substances and Disease Registry

ERRS= Emergency and Rapid Response Services

## 6. Additional sources of information

### 6.1 Internet location of additional information/report

Please find additional information on the UEPA OSC Website:

[http://www.epaosc.org/site/site\\_profile.aspx?site\\_id=9672](http://www.epaosc.org/site/site_profile.aspx?site_id=9672)

### 6.2 Reporting Schedule

The OSC will issue an additional Polrep on a date to be determined.

## 7. Situational Reference Materials

Please refer to the Joint EPA / ATSDR Chemical Specific Health Consultation for Action Levels for Elemental Mercury Spills:

[http://www.atsdr.cdc.gov/emergency\\_response/Action\\_Levels\\_for\\_Elemental\\_Mercury\\_Spills\\_2012.pdf](http://www.atsdr.cdc.gov/emergency_response/Action_Levels_for_Elemental_Mercury_Spills_2012.pdf)